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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 09/830,271 | BALE ET AL. | |
| | Examiner | Art Unit | |
| | Ashok B. Patel | 2154 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *11 June 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-38* is/are pending in the application.

4a) Of the above claim(s) *1-17* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *18-38* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

## DETAILED ACTION

**1.** Claims 1-38 are subject to examination. Claims 1-17 are cancelled.

**2.** In view of the appeal brief filed on 6/3/2006, PROSECUTION IS HEREBY REOPENED. A new ground of rejection set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

### *Claim Rejections - 35 USC § 112*

**3.** The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

**4.** Claim 23 recites the limitation "the access controller" in lines 6-7. There is insufficient antecedent basis for this limitation in the claim.

### *Claim Rejections - 35 USC § 102*

**5.** The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

**6.** Claims 18-38 are rejected under 35 U.S.C. 102(e) as being anticipated by Jin et al. (hereinafter Jin)(US 6,189,033 B1)

**Referring to claim 18,**

Jin teaches **a messaging platform**

(Fig. 1, element 20 which is "Data Service System" that can be, as stated in col. 3, line 20-25, "The data service system 20 can be employed by an Internet/Intranet Service Provider (ISP) to offer data services (e.g., web, news, or advertisement) and other services (e.g., e-commerce, **e-mail**) to users or subscribers connected to the data service system 20. The data service system 20 can also be referred to as an ISP system."

This "data service system 20" is shown with internal details in Fig.2 employing elements "SERVER" as 24....24n, as stated in col. 4, line 50-53, "Referring to FIG. 2, the data service system 20 includes a number of servers 24 through 24n, a router 21, a network address translator 22, and a firewall 23."

Now, as stated in col. 5, line 60-66, "FIG. 3 shows the structure of a connection-based server 50 which can be any one of the connection-based servers of the servers 24-24n. As can be seen from FIG. 3, the server 50 includes a number of content sites 108 through 108n. Each of the content sites 108-108n can be constructed using known Internet technology."

Having learned that Fig. 3 is connection-based email server including a number of content sites 108 through 108n, Now, col. 5, line 47-col. 6, line 9 reads, "Each of the servers 24-24n can be a connection-based (i.e., TCP-based) server or a non-connection-based server. A connection-based server can handle classifiable access requests to the contents hosted in the server. An example of a connection-based server is a web content server, an e-mail server, a news server, an e-commerce server, a local service server, a domain name server, and a proxy server. An example of a non-connection-based server is an address assignment server. Each connection-based server of the servers 24-24n includes a number of content sites. If a connection-based server is a web server, then the content sites are web sites, each of which contains a number of web pages. **FIG. 3 shows the structure of a connection-based server 50 which can be any one of the connection-based servers of the servers 24-24n.**

As can be seen from FIG. 3, the server 50 includes a number of content sites 108 through 108n. Each of the content sites 108-108n can be constructed using known Internet technology. A server application 106 is included in the server 50 that provides accesses to the content sites 108-108n. The application 106 can be any known application of a server in an ISP system. The server 50 also includes the access processing system 100 connected to the application 106. The access processing system 100 includes a QoS (i.e., Quality-of-Service) library 105 that is connected to the server application 106. The QoS library 105 provides an interface for the access processing system 100 to the application 106 such that the access processing system

100 is transparent to the application 106. This feature will be described in more detail below."

**Note: The underlined text above clearly elucidates that the ISP having Fig. 3 is connection-based email server including a number of content sites 108 through 108n, . Thus, email server including a number of content sites 108 through 108n, is "a messaging platform.")**

**including:**

**a message store arranged to receive message data and to store said message data for subsequent retrieval;**

(col. 5, line 23-28, "The local service servers support a variety of Internet applications to provide services such as access to the World Wide Web, electronic mail, bulletin boards, chat rooms, and news groups. Using web browser and other client applications, users can access Web pages, news, and e-mail stored in the local service servers via their terminals.")

**Note: The underlined text above clearly elucidates the claim limitation.)**

**a control interface arranged to allow the communication of control signals (col. 6, line 59-col. 7, line 48, Note: "The access request may be a request for connection to a content site or a request to transfer data from a content site.") between the messaging platform and a service provider**

(col. 8, line 19-32, "As can be seen from FIG. 3, the access processing system 100 includes a classifier 101, a number of class processors 102a-102n, and a submission queue 103, in addition to the QoS library 105. Alternatively, the access

processing system 100 may function without some the above-mentioned modules. For example, the classifier 101 may be integrated into each of the class processors 102a-102n. As a further example, multiple submission queues may be used. Additional modules may also be included in the access processing system 100. Furthermore, the access processing system 100 may be implemented as a thread within the context of the application 106. In this case, the QoS library 105 and submission queue 103 may not be used."

**Note: Of the several options of implementation offered by Jin for it's invention, the options indicated by underlined text above is of importance to us in defining the "a control interface arranged to allow the communication of control signals", and as such "an access processing system 100 integrated into the class processor implemented as a thread a thread within the context of the application 106" is the control interface.**

(col. 5, line 47-col. 6, line 9, "Each of the servers 24-24n can be a connection-based (i.e., TCP-based) server or a non-connection-based server. A connection-based server can handle classifiable access requests to the contents hosted in the server. An example of a connection-based server is a web content server, an e-mail server, a news server, an e-commerce server, a local service server, a domain name server, and a proxy server. An example of a non-connection-based server is an address assignment server. Each connection-based server of the servers 24-24n includes a number of content sites. If a connection-based server is a web server, then the content sites are web sites, each of which contains a number of web pages. FIG. 3 shows the structure

of a connection-based server 50 which can be any one of the connection-based servers of the servers 24-24n.

As can be seen from FIG. 3, the server 50 includes a number of content sites 108 through 108n. Each of the content sites 108-108n can be constructed using known Internet technology. A server application 106 is included in the server 50 that provides accesses to the content sites 108-108n. The application 106 can be any known application of a server in an ISP system. The server 50 also includes the access processing system 100 connected to the application 106. The access processing system 100 includes a QoS (i.e., Quality-of-Service) library 105 that is connected to the server application 106. The QoS library 105 provides an interface for the access processing system 100 to the application 106 such that the access processing system 100 is transparent to the application 106. This feature will be described in more detail below."

**Note: Thus "between the messaging platform and a service provider" is revealed clearly by Jin.)**; and

**an overload controller provider on the control interface and responsive to an overload condition of the platform and arranged, in response to the said overload condition, to limit loading of the platform by signals arriving on said control interface.**

(col. 2, line 23-27, "A still further feature of the present invention is to allow a data service system to provide stable and targeted performance, overload protection, and tiered levels of request class performance for its hosted content sites."

Col. 3, line 53-57, "The access throughput control function of the access processing system 100 also provides the data service system 20 with overload protection and tiered levels of requests class performance when the data service system 20 are hosting multiple content sites."

Col. 6, line 35-37, "In addition, the access processing system 100 provides the server 50 with overload protection and tiered levels of request class performance."

**Note: Evidently Jin's "the access processing system" does provide "overload protection" . How?**

Jin clearly identifies as indicated below as "**Admission Controller"** as "**overload** controller" implemented on **"the access processing system 100 integrated into the class processor implemented as a thread a thread within the context of the application 106".**

Let us look at col. 9, line 21-63, "FIG. 5 shows the structure of a class processor 140 which can be any one of the class processors 102a through 102n of FIG. 3. As can be seen from FIG. 5, the class processor 140 includes an admission controller 148, a scheduler 150, and a rejection processor 149. The admission controller 148 is used in the class processor 140 to receive the access request and to process the access request received in accordance with the corresponding predetermined admission control policy. If the admission controller 148 determines to accept the access request based on the corresponding admission control policy, then the admission controller 148 sends the access request to the submission queue 103 (FIG. 3). If the admission controller 148 determines that the access request cannot be accepted based on the

corresponding admission control policy, then the admission controller 148 can do one of two things. First, the admission controller 148 can send the access request to the rejection processor 149 directly. The second thing the admission controller can do is to place the access request on a best effort queue within the scheduler 150 (shown in FIG. 6 as the best effort queue 152)."....

The admission controller 148 can be implemented using any known technology. For example, when the admission control policy specifies a maximum access rate or minimally guaranteed access rate for the corresponding content site, the admission controller 148 first determines whether the specified access rate has been reached when receiving the access request. If so, the admission controller 148 can deny or defer access of the access request. If not, the admission controller 148 can accept the access request. This can be done using known technology."

Also, in order to learn more about the admission control policy, look at col. 6, line 59-col. 7, line 5, "To provide the access throughput control function, the access processing system 100 employs a predetermined or pre-configured admission control policy for each of the content sites 108-108n that requires such control. The admission control policy specifies, for example, the maximum connection and data transfer rate for the corresponding content site or the guaranteed minimum connection and data transfer rate for the content site. As another example, the admission control policy may be based on the contents accessed (e.g., pathnames) or resource utilizations (e.g., CPU and/or disk accesses). The access processing system 100 determines whether an

access request should be accepted based on the corresponding admission control policy."

**Note: Thus, the underlined text above indicates that Jin has already implemented "admission controller including a scheduler and a rejection processor of Fig. 5 along with all the components of Fig. 3, element 100 on the "the access processing system 100 integrated into the class processor implemented as a thread a thread within the context of the application 106" which is "an overload controller."**

**Thus Jin clearly teaches "an overload controller provided on the control interface and responsive to an overload condition of the platform and arranged, in response to the said overload condition, to limit loading of the platform by signals arriving on said control interface.")**

**Referring to claim 19,**

**Jin teaches a platform as in claim 18 wherein said control interface is arranged to receive control requests instructing transactions on the messaging platform,**

**(col. 6, line 59-col. 7, line 48, Note: "The access request may be a request for connection to a content site or a request to transfer data from a content site.",** col. 5, line 47-col. 6, line 9, "Each of the servers 24-24n can be a connection-based (i.e., TCP-based) server or a non-connection-based server. A connection-based server can handle classifiable access requests to the contents hosted in the server. An example of a connection-based server is a web content server, an e-mail server, a news server, an

e-commerce server, a local service server, a domain name server, and a proxy server. An example of a non-connection-based server is an address assignment server. Each connection-based server of the servers 24-24n includes a number of content sites. If a connection-based server is a web server, then the content sites are web sites, each of which contains a number of web pages. FIG. 3 shows the structure of a connection-based server 50 which can be any one of the connection-based servers of the servers 24-24n.

As can be seen from FIG. 3, the server 50 includes a number of content sites 108 through 108n. Each of the content sites 108-108n can be constructed using known Internet technology. A server application 106 is included in the server 50 that provides accesses to the content sites 108-108n. The application 106 can be any known application of a server in an ISP system. The server 50 also includes the access processing system 100 connected to the application 106."

**Note: Thus, Jin teaches "wherein said control interface is arranged to receive control requests instructing transactions on the messaging platform,".)** and

**wherein said overload controller includes means for denying at least some of the control requests in response to the overload condition.**

(col. 9, line 21-63, "If the admission controller 148 determines that the access request cannot be accepted based on the corresponding admission control policy, then the admission controller 148 can do one of two things. First, the admission controller 148 can send the access request to the rejection processor 149 directly."

Col. 10, line 26-27, "The rejection processor 149 is employed to handle the rejection process of the access requests."

**Note: Jin thus gives us "the rejection processor 149" as the means included by overload controller for denying at least some of the control requests in response to the overload condition.)**

**Referring to claim 20,**

Jin teaches a platform as in claim 18 further comprising:

**an access controller** (col. 9, line 21-63, "If the admission controller 148 determines that the access request cannot be accepted based on the corresponding admission control policy, then the admission controller 148 can do one of two things. First, the admission controller 148 can send the access request to the rejection processor 149 directly." **Note: "the rejection processor 149 " is an access controller.** ) arranged to receive data and control channels from one or more service providers

(Fig. 1, element 20 which is "Data Service System" that can be, as stated in col. 3, line 20-25, "The data service system 20 can be employed by an Internet/Intranet Service Provider (ISP) to offer data services (e.g., web, news, or advertisement) and other services (e.g., e-commerce, **e-mail**) to users or subscribers connected to the data service system 20. The data service system 20 can also be referred to as an ISP system."

This "data service system 20" is shown with internal details in Fig.2 employing elements "SERVER" as 24....24n, as stated in col. 4, line 50-53, "Referring to FIG. 2,

the data service system 20 includes a number of servers 24 through 24n, a router 21, a network address translator 22, and a firewall 23."

Now, as stated in col. 5, line 60-66, "FIG. 3 shows the structure of a connection-based server 50 which can be any one of the connection-based servers of the servers 24-24n. As can be seen from FIG. 3, the server 50 includes a number of content sites 108 through 108n. Each of the content sites 108-108n can be constructed using known Internet technology."

Having learned that Fig. 3 is connection-based email server including a number of content sites 108 through 108n, Now, col. 5, line 47-col. 6, line 9 reads, "Each of the servers 24-24n can be a connection-based (i.e., TCP-based) server or a non-connection-based server. A connection-based server can handle classifiable access requests to the contents hosted in the server. An example of a connection-based server is a web content server, an e-mail server, a news server, an e-commerce server, a local service server, a domain name server, and a proxy server. An example of a non-connection-based server is an address assignment server. Each connection-based server of the servers 24-24n includes a number of content sites. If a connection-based server is a web server, then the content sites are web sites, each of which contains a number of web pages. **FIG. 3 shows the structure of a connection-based server 50 which can be any one of the connection-based servers of the servers 24-24n.**

As can be seen from FIG. 3, the server 50 includes a number of content sites 108 through 108n. Each of the content sites 108-108n can be constructed using known Internet technology. A server application 106 is included in the server 50 that provides

accesses to the content sites 108-108n. The application 106 can be any known application of a server in an ISP system. The server 50 also includes the access processing system 100 connected to the application 106. The access processing system 100 includes a QoS (i.e., Quality-of-Service) library 105 that is connected to the server application 106. The QoS library 105 provides an interface for the access processing system 100 to the application 106 such that the access processing system 100 is transparent to the application 106. This feature will be described in more detail below.") **and connected to said overload controller, wherein said overload controller limits loading of said platform by signals arriving on the control interface by functioning in combination with said access controller** (Col. 10, line 26-27, "The rejection processor 149 is employed to handle the rejection process of the access requests.")

**Referring to claim 21,**

Jin teaches a platform as in claim 18 further comprising:

**an access controller** (col. 9, line 21-63, "If the admission controller 148 determines that the access request cannot be accepted based on the corresponding admission control policy, then the admission controller 148 can do one of two things. First, the admission controller 148 can send the access request to the rejection processor 149 directly." **Note: "the rejection processor 149 " is an access controller.** ) arranged to receive data and control channels from one or more service providers

(Fig. 1, element 20 which is "Data Service System" that can be, as stated in col. 3, line 20-25, "The data service system 20 can be employed by an Internet/Intranet Service Provider (ISP) to offer data services (e.g., web, news, or advertisement) and other services (e.g., e-commerce, **e-mail**) to users or subscribers connected to the data service system 20. The data service system 20 can also be referred to as an ISP system."

This "data service system 20" is shown with internal details in Fig.2 employing elements "SERVER" as 24....24n, as stated in col. 4, line 50-53, "Referring to FIG. 2, the data service system 20 includes a number of servers 24 through 24n, a router 21, a network address translator 22, and a firewall 23."

Now, as stated in col. 5, line 60-66, "FIG. 3 shows the structure of a connection-based server 50 which can be any one of the connection-based servers of the servers 24-24n. As can be seen from FIG. 3, the server 50 includes a number of content sites 108 through 108n. Each of the content sites 108-108n can be constructed using known Internet technology."

Having learned that Fig. 3 is connection-based email server including a number of content sites 108 through 108n, Now, col. 5, line 47-col. 6, line 9 reads, "Each of the servers 24-24n can be a connection-based (i.e., TCP-based) server or a non-connection-based server. A connection-based server can handle classifiable access requests to the contents hosted in the server. An example of a connection-based server is a web content server, an e-mail server, a news server, an e-commerce server, a local service server, a domain name server, and a proxy server. An example of a

non-connection-based server is an address assignment server. Each connection-based server of the servers 24-24n includes a number of content sites. If a connection-based server is a web server, then the content sites are web sites, each of which contains a number of web pages. **FIG. 3 shows the structure of a connection-based server 50 which can be any one of the connection-based servers of the servers 24-24n.**

As can be seen from FIG. 3, the server 50 includes a number of content sites 108 through 108n. Each of the content sites 108-108n can be constructed using known Internet technology. A server application 106 is included in the server 50 that provides accesses to the content sites 108-108n. The application 106 can be any known application of a server in an ISP system. The server 50 also includes the access processing system 100 connected to the application 106. The access processing system 100 includes a QoS (i.e., Quality-of-Service) library 105 that is connected to the server application 106. The QoS library 105 provides an interface for the access processing system 100 to the application 106 such that the access processing system 100 is transparent to the application 106. This feature will be described in more detail below.") **and connected to said overload controller, wherein said overload controller limits loading of said platform by signals arriving on the control interface by functioning in combination with said access controller, wherein said overload controller functions in combination with said access controller to limit loading of said platform by signals arriving on the control interface by configuring the access controller to deny access to the platform of certain predetermined signals.** (Col. 10, line 26-27, "The rejection processor 149 is employed

to handle the rejection process of the access requests." col. 6, line 59-col. 7, line 48, Note: "The access request may be a request for connection to a content site or a request to transfer data from a content site.")

**Referring to claim 22,**

**Jin teaches a platform as in claim 18 wherein said service provider comprises an end user** (Fig. 1, elements 11a.....11n, col. 4, line 19-24, "Each of the user terminals 11a-11n In may be at a residence, a school, or an office of the user. Each of the user terminals 11a-11n includes a web browser application program that allows the user to access the data services offered by the data service system 20 or other data service systems in the global Internet 14 or Intranet 13.")

**Referring to claim 23,**

**Jin teaches a platform as in claim 18 wherein:**

**said control interface is arranged to receive control requests instructing transactions on the messaging platform** (col. 6, line 59-col. 7, line 48, Note: "The access request may be a request for connection to a content site or a request to transfer data from a content site.", col. 5, line 47-col. 6, line 9, "Each of the servers 24-24n can be a connection-based (i.e., TCP-based) server or a non-connection-based server. A connection-based server can handle classifiable access requests to the contents hosted in the server. An example of a connection-based server is a web content server, an e-mail server, a news server, an e-commerce server, a local service server, a domain name server, and a proxy server. An example of a non-connection-based server is an address assignment server. Each connection-based server of the

servers 24-24n includes a number of content sites. If a connection-based server is a web server, then the content sites are web sites, each of which contains a number of web pages. FIG. 3 shows the structure of a connection-based server 50 which can be any one of the connection-based servers of the servers 24-24n.

As can be seen from FIG. 3, the server 50 includes a number of content sites 108 through 108n. Each of the content sites 108-108n can be constructed using known Internet technology. A server application 106 is included in the server 50 that provides accesses to the content sites 108-108n. The application 106 can be any known application of a server in an ISP system. The server 50 also includes the access processing system 100 connected to the application 106.

**Note: Thus, Jin teaches "wherein said control interface is arranged to receive control requests instructing transactions on the messaging platform,".),**

**said overload controller includes means for denying at least some of the control requests in response to the overload condition** (col. 9, line 21-63, "If the admission controller 148 determines that the access request cannot be accepted based on the corresponding admission control policy, then the admission controller 148 can do one of two things. First, the admission controller 148 can send the access request to the rejection processor 149 directly."

Col. 10, line 26-27, "The rejection processor 149 is employed to handle the rejection process of the access requests."

**Note: Jin thus gives us "the rejection processor 149" as the means included by overload controller for denying at least some of the control requests in response to the overload condition.**), and

**said overload controller detects the rate of transactions** (col. 9, line 54-60, "The admission controller 148 can be implemented using any known technology. For example, when the admission control policy specifies a maximum access rate or minimally guaranteed access rate for the corresponding content site, the admission controller 148 first determines whether the specified access rate has been reached when receiving the access request. If so, the admission controller 148 can deny or defer access of the access request. If not, the admission controller 148 can accept the access request. This can be done using known technology.", Col. 6, line 11-26, "The access processing system 100 receives all the access requests to the content sites 108-108n before they are supplied to the content sites 108-108n via the QoS library 105 and the application 106. As described above and in accordance with one embodiment of the present invention, the access processing system 100 provides access throughput control to each or some of the content sites within the server 50 by controlling or limiting the access request rate and data transfer rate of those content sites. The access request rate refers to the connection rate which means the number of connections per second during the enforcement interval. The data transfer rate refers to the amount of data transferred per second during the enforcement interval. Parameters such as enforcement interval, class (e.g., IP address mask or content type), queue size, and threshold values are used to determine the admission control policy.") **between the**

**access controller** (col. 9, line 21-63, "If the admission controller 148 determines that the access request cannot be accepted based on the corresponding admission control policy, then the admission controller 148 can do one of two things. First, the admission controller 148 can send the access request to the rejection processor 149 directly." **Note: "the rejection processor 149 " is an access controller. ) and a plurality of said service providers.** (Fig. 1, element 20 which is "Data Service System" that can be, as stated in col. 3, line 20-25, "The data service system 20 can be employed by an Internet/Intranet Service Provider (ISP) to offer data services (e.g., web, news, or advertisement) and other services (e.g., e-commerce, **e-mail**) to users or subscribers connected to the data service system 20. The data service system 20 can also be referred to as an ISP system."

This "data service system 20" is shown with internal details in Fig.2 employing elements "SERVER" as 24....24n, as stated in col. 4, line 50-53, "Referring to FIG. 2, the data service system 20 includes a number of servers 24 through 24n, a router 21, a network address translator 22, and a firewall 23."

Now, as stated in col. 5, line 60-66, "FIG. 3 shows the structure of a connection-based server 50 which can be any one of the connection-based servers of the servers 24-24n. As can be seen from FIG. 3, the server 50 includes a number of content sites 108 through 108n. Each of the content sites 108-108n can be constructed using known Internet technology."

Having learned that Fig. 3 is connection-based email server including a number of content sites 108 through 108n, Now, col. 5, line 47-col. 6, line 9 reads, "Each of the

servers 24-24n can be a connection-based (i.e., TCP-based) server or a non-connection-based server. A connection-based server can handle classifiable access requests to the contents hosted in the server. An example of a connection-based server is a web content server, an e-mail server, a news server, an e-commerce server, a local service server, a domain name server, and a proxy server. An example of a non-connection-based server is an address assignment server. Each connection-based server of the servers 24-24n includes a number of content sites. If a connection-based server is a web server, then the content sites are web sites, each of which contains a number of web pages. **FIG. 3 shows the structure of a connection-based server 50 which can be any one of the connection-based servers of the servers 24-24n.**

As can be seen from FIG. 3, the server 50 includes a number of content sites 108 through 108n. Each of the content sites 108-108n can be constructed using known Internet technology. A server application 106 is included in the server 50 that provides accesses to the content sites 108-108n. The application 106 can be any known application of a server in an ISP system. The server 50 also includes the access processing system 100 connected to the application 106. The access processing system 100 includes a QoS (i.e., Quality-of-Service) library 105 that is connected to the server application 106. The QoS library 105 provides an interface for the access processing system 100 to the application 106 such that the access processing system 100 is transparent to the application 106. This feature will be described in more detail below.")

**Referring to claim 24,**

Jin teaches a platform as in claim 18 in which the overload controller is programmed with criteria for applying different classes of service to control requests received at the control interface and the overload controller is arranged, in response to an overload condition on the platform, selectively to deny control requests depending on a class of service assigned in accordance with the said criteria to the control request. (col. 7, line 49-51, "The access processing system 100 can be implemented in hardware, software (e.g., in operating software or at user application level), or firmware form."

col. 8, line 20-65, "As can be seen from FIG. 3, the access processing system 100 includes a classifier 101, a number of class processors 102a-102n, and a submission queue 103, in addition to the QoS library 105. Alternatively, the access processing system 100 may function without some the above-mentioned modules. For example, the classifier 101 may be integrated into each of the class processors 102a-102n. As a further example, multiple submission queues may be used. Additional modules may also be included in the access processing system 100. Furthermore, the access processing system 100 may be implemented as a thread within the context of the application 106. In this case, the QoS library 105 and submission queue 103 may not be used.

The classifier 101 is used to determine to which one of the class processors 102a-102n the received access request should be sent. The classifier 101 makes this determination based on the destination IP address of the access request, or any other attribute such as content type (i.e., pathname in the sender's address), session

identifier, destination server name of the access request. As described above, each of the class processors 102a-102n is for one of the content sites 108-108n, or for one class of the content sites 108-108n that share the same admission control policy. FIG. 4 shows the classifying process of the classifier 101, which will be described in more detail below. The classifier 101 can be implemented using any known technology.

Referring again to FIG. 3, the class processors 102a-102n are used to determine whether a received access request should be accepted based on the corresponding admission control policy. If so, the received access request is sent to the submission queue 103. If not, the access request is rejected or deferred and again processed to determine if it can be accepted on the best effort basis. FIGS. 5 and 6 show in more detail the structure of each of the class processors 102a-102n, which will be described in more detail below.

The submission queue 103 is used to queue the accepted access requests before they are received by the application library 105. The submission queue 103 has a predetermined maximum queue depth. In one embodiment, the submission queue is a FIFO (First-In-First-Out) queue. Alternatively, the submission queue 103 can be other type of queue. The submission queue 103 can be implemented by any known technology. The submission queue 103 maintains the current depth of the queue and the class processors 102a-102n use the queue depth data of the submission queue 103 in the admission control decision.")

**Referring to claim 25,**

**Jin teaches a platform as in claim 18 in which:**

**the overload controller is programmed with criteria for applying different classes of service to control requests received at the control interface; the overload controller is arranged, in response to an overload condition on the platform, selectively to deny control requests depending on a class of service assigned in accordance with the said criteria to the control request, and the criteria apply a class of service selected depending on the identity of a service provider originating the said control requests**. (col. 7, line 49-51, "The access processing system 100 can be implemented in hardware, software (e.g., in operating software or at user application level), or firmware form."

col. 8, line 20-65, "As can be seen from FIG. 3, the access processing system 100 includes a classifier 101, a number of class processors 102a-102n, and a submission queue 103, in addition to the QoS library 105. Alternatively, the access processing system 100 may function without some the above-mentioned modules. For example, the classifier 101 may be integrated into each of the class processors 102a-102n. As a further example, multiple submission queues may be used. Additional modules may also be included in the access processing system 100. Furthermore, the access processing system 100 may be implemented as a thread within the context of the application 106. In this case, the QoS library 105 and submission queue 103 may not be used.

The classifier 101 is used to determine to which one of the class processors 102a-102n the received access request should be sent. The classifier 101 makes this determination based on the destination IP address of the access request, or any other

attribute such as content type (i.e., pathname in the sender's address), session identifier, destination server name of the access request. As described above, each of the class processors 102a-102n is for one of the content sites 108-108n, or for one class of the content sites 108-108n that share the same admission control policy. FIG. 4 shows the classifying process of the classifier 101, which will be described in more detail below. The classifier 101 can be implemented using any known technology.

Referring again to FIG. 3, the class processors 102a-102n are used to determine whether a received access request should be accepted based on the corresponding admission control policy. If so, the received access request is sent to the submission queue 103. If not, the access request is rejected or deferred and again processed to determine if it can be accepted on the best effort basis. FIGS. 5 and 6 show in more detail the structure of each of the class processors 102a-102n, which will be described in more detail below.

The submission queue 103 is used to queue the accepted access requests before they are received by the application library 105. The submission queue 103 has a predetermined maximum queue depth. In one embodiment, the submission queue is a FIFO (First-In-First-Out) queue. Alternatively, the submission queue 103 can be other type of queue. The submission queue 103 can be implemented by any known technology. The submission queue 103 maintains the current depth of the queue and the class processors 102a-102n use the queue depth data of the submission queue 103 in the admission control decision."

**Please also note at col. 10, line 49-51, "The predetermined depth threshold value can be set in accordance with the system specification of the data service system 20." Which is identity of ISP as explained in claim 18.)**

**Referring to claim 26,**

**Jin teaches a platform as in claim 18 in which the overload controller is programmed with criteria for applying different classes of service to control requests received at the control interface and the overload controller is arranged, in response to an overload condition on the platform, selectively to deny control requests depending on a class of service assigned in accordance with the said criteria to the control request,** (col. 6, line 59-col. 7, line 48, Note: "The access request may be a request for connection to a content site or a request to transfer data from a content site.", col. 7, line 49-51, "The access processing system 100 can be implemented in hardware, software (e.g., in operating software or at user application level), or firmware form."

col. 8, line 20-65, "As can be seen from FIG. 3, the access processing system 100 includes a classifier 101, a number of class processors 102a-102n, and a submission queue 103, in addition to the QoS library 105. Alternatively, the access processing system 100 may function without some the above-mentioned modules. For example, the classifier 101 may be integrated into each of the class processors 102a-102n. As a further example, multiple submission queues may be used. Additional modules may also be included in the access processing system 100. Furthermore, the access processing system 100 may be implemented as a thread within the context of

the application 106. In this case, the QoS library 105 and submission queue 103 may not be used.

The classifier 101 is used to determine to which one of the class processors 102a-102n the received access request should be sent. The classifier 101 makes this determination based on the destination IP address of the access request, or any other attribute such as content type (i.e., pathname in the sender's address), session identifier, destination server name of the access request. As described above, each of the class processors 102a-102n is for one of the content sites 108-108n, or for one class of the content sites 108-108n that share the same admission control policy. FIG. 4 shows the classifying process of the classifier 101, which will be described in more detail below. The classifier 101 can be implemented using any known technology.

Referring again to FIG. 3, the class processors 102a-102n are used to determine whether a received access request should be accepted based on the corresponding admission control policy. If so, the received access request is sent to the submission queue 103. If not, the access request is rejected or deferred and again processed to determine if it can be accepted on the best effort basis. FIGS. 5 and 6 show in more detail the structure of each of the class processors 102a-102n, which will be described in more detail below.

The submission queue 103 is used to queue the accepted access requests before they are received by the application library 105. The submission queue 103 has a predetermined maximum queue depth. In one embodiment, the submission queue is a FIFO (First-In-First-Out) queue. Alternatively, the submission queue 103 can be other

type of queue. The submission queue 103 can be implemented by any known technology. The submission queue 103 maintains the current depth of the queue and the class processors 102a-102n use the queue depth data of the submission queue 103 in the admission control decision.") **and in which the criteria apply a class of service selected depending on the identity of a subscriber mailbox to which the control request applies (Note : As stated above, The classifier 101 makes this determination based on the destination IP address of the access request, or any other attribute such as content type (i.e., pathname in the sender's address), session identifier, destination server name of the access request.)**

**Referring to claim 27,**

**Jin teaches a platform as in claim 18 in which the overload controller is programmed with criteria for applying different classes of service to control requests received at the control interface and the overload controller is arranged, in response to an overload condition on the platform, selectively to deny control requests depending on a class of service assigned in accordance with the said criteria to the control request**(col. 7, line 49-51, "The access processing system 100 can be implemented in hardware, software (e.g., in operating software or at user application level), or firmware form."

col. 8, line 20-65, "As can be seen from FIG. 3, the access processing system 100 includes a classifier 101, a number of class processors 102a-102n, and a submission queue 103, in addition to the QoS library 105. Alternatively, the access processing system 100 may function without some the above-mentioned modules. For

example, the classifier 101 may be integrated into each of the class processors 102a-102n. As a further example, multiple submission queues may be used. Additional modules may also be included in the access processing system 100. Furthermore, the access processing system 100 may be implemented as a thread within the context of the application 106. In this case, the QoS library 105 and submission queue 103 may not be used.

The classifier 101 is used to determine to which one of the class processors 102a-102n the received access request should be sent. The classifier 101 makes this determination based on the destination IP address of the access request, or any other attribute such as content type (i.e., pathname in the sender's address), session identifier, destination server name of the access request. As described above, each of the class processors 102a-102n is for one of the content sites 108-108n, or for one class of the content sites 108-108n that share the same admission control policy. FIG. 4 shows the classifying process of the classifier 101, which will be described in more detail below. The classifier 101 can be implemented using any known technology.

Referring again to FIG. 3, the class processors 102a-102n are used to determine whether a received access request should be accepted based on the corresponding admission control policy. If so, the received access request is sent to the submission queue 103. If not, the access request is rejected or deferred and again processed to determine if it can be accepted on the best effort basis. FIGS. 5 and 6 show in more detail the structure of each of the class processors 102a-102n, which will be described in more detail below.

The submission queue 103 is used to queue the accepted access requests before they are received by the application library 105. The submission queue 103 has a predetermined maximum queue depth. In one embodiment, the submission queue is a FIFO (First-In-First-Out) queue. Alternatively, the submission queue 103 can be other type of queue. The submission queue 103 can be implemented by any known technology. The submission queue 103 maintains the current depth of the queue and the class processors 102a-102n use the queue depth data of the submission queue 103 in the admission control decision."), **and in which the criteria apply different service classes depending on the transaction requested by the control request. (Note : As stated above, The classifier 101 makes this determination based on the destination IP address of the access request, or any other attribute such as content type (i.e., pathname in the sender's address), session identifier, destination server name of the access request.)**

**Referring to claim 28,**

**Jin teaches a messaging system comprising: a service platform running a messaging service application; and a messaging platform** (Fig. 1, element 20 which is "Data Service System" that can be, as stated in col. 3, line 20-25, "The data service system 20 can be employed by an Internet/Intranet Service Provider (ISP) to offer data services (e.g., web, news, or advertisement) and other services (e.g., e-commerce, **e-mail**) to users or subscribers connected to the data service system 20. The data service system 20 can also be referred to as an ISP system."

This "data service system 20" is shown with internal details in Fig.2 employing elements "SERVER" as 24....24n, as stated in col. 4, line 50-53, "Referring to FIG. 2, the data service system 20 includes a number of servers 24 through 24n, a router 21, a network address translator 22, and a firewall 23."

Now, as stated in col. 5, line 60-66, "FIG. 3 shows the structure of a connection-based server 50 which can be any one of the connection-based servers of the servers 24-24n. As can be seen from FIG. 3, the server 50 includes a number of content sites 108 through 108n. Each of the content sites 108-108n can be constructed using known Internet technology."

Having learned that Fig. 3 is connection-based email server including a number of content sites 108 through 108n, Now, col. 5, line 47-col. 6, line 9 reads, "Each of the servers 24-24n can be a connection-based (i.e., TCP-based) server or a non-connection-based server. A connection-based server can handle classifiable access requests to the contents hosted in the server. An example of a connection-based server is a web content server, an e-mail server, a news server, an e-commerce server, a local service server, a domain name server, and a proxy server. An example of a non-connection-based server is an address assignment server. Each connection-based server of the servers 24-24n includes a number of content sites. If a connection-based server is a web server, then the content sites are web sites, each of which contains a number of web pages. **FIG. 3 shows the structure of a connection-based server 50 which can be any one of the connection-based servers of the servers 24-24n.**

As can be seen from FIG. 3, the server 50 includes a number of content sites 108 through 108n. Each of the content sites 108-108n can be constructed using known Internet technology. A server application 106 is included in the server 50 that provides accesses to the content sites 108-108n. The application 106 can be any known application of a server in an ISP system. The server 50 also includes the access processing system 100 connected to the application 106. The access processing system 100 includes a QoS (i.e., Quality-of-Service) library 105 that is connected to the server application 106. The QoS library 105 provides an interface for the access processing system 100 to the application 106 such that the access processing system 100 is transparent to the application 106. This feature will be described in more detail below."

**Note: The underlined text above clearly elucidates that the ISP having Fig. 3 is connection-based email server including a number of content sites 108 through 108n, is "a messaging system comprising: a service platform running a messaging service application; and email server including a number of content sites 108 through 108n, is "a messaging platform.")**

**comprising:**

**a message store arranged to receive message data and to store said message data for subsequent retrieval;**

(col. 5, line 23-28, "The local service servers support a variety of Internet applications to provide services such as access to the World Wide Web, electronic mail, bulletin boards, chat rooms, and news groups. Using web browser and other client

applications, users can access Web pages, news, and e-mail stored in the local service servers via their terminals.")

**Note: The underlined text above clearly elucidates the claim limitation.)**

**a control interface arranged to allow the communication of control signals between the messaging platform and a service provider**

(col. 6, line 59-col. 7, line 48, Note: "The access request may be a request for connection to a content site or a request to transfer data from a content site.", col. 8, line 19-32, "As can be seen from FIG. 3, the access processing system 100 includes a classifier 101, a number of class processors 102a-102n, and a submission queue 103, in addition to the QoS library 105. Alternatively, the access processing system 100 may function without some the above-mentioned modules. For example, the classifier 101 may be integrated into each of the class processors 102a-102n. As a further example, multiple submission queues may be used. Additional modules may also be included in the access processing system 100. Furthermore, the access processing system 100 may be implemented as a thread within the context of the application 106. In this case, the QoS library 105 and submission queue 103 may not be used."

**Note: Of the several options of implementation offered by Jin for it's invention, the options indicated by underlined text above is of importance to us in defining the "a control interface arranged to allow the communication of control signals", and as such "an access processing system 100 integrated into the class processor implemented as a thread a thread within the context of the application 106" is the control interface.**

(col. 5, line 47-col. 6, line 9, "Each of the servers 24-24n can be a connection-based (i.e., TCP-based) server or a non-connection-based server. A connection-based server can handle classifiable access requests to the contents hosted in the server. An example of a connection-based server is a web content server, an e-mail server, a news server, an e-commerce server, a local service server, a domain name server, and a proxy server. An example of a non-connection-based server is an address assignment server. Each connection-based server of the servers 24-24n includes a number of content sites. If a connection-based server is a web server, then the content sites are web sites, each of which contains a number of web pages. FIG. 3 shows the structure of a connection-based server 50 which can be any one of the connection-based servers of the servers 24-24n.

As can be seen from FIG. 3, the server 50 includes a number of content sites 108 through 108n. Each of the content sites 108-108n can be constructed using known Internet technology. A server application 106 is included in the server 50 that provides accesses to the content sites 108-108n. The application 106 can be any known application of a server in an ISP system. The server 50 also includes the access processing system 100 connected to the application 106. The access processing system 100 includes a QoS (i.e., Quality-of-Service) library 105 that is connected to the server application 106. The QoS library 105 provides an interface for the access processing system 100 to the application 106 such that the access processing system 100 is transparent to the application 106. This feature will be described in more detail below."

**Note: Thus "between the messaging platform and a service provider" is revealed clearly by Jin.)**; and

**an overload controller provider on the control interface and responsive to an overload condition of the platform and arranged, in response to the said overload condition, to limit loading of the platform by signals arriving on said control interface.**

(col. 2, line 23-27, "A still further feature of the present invention is to allow a data service system to provide stable and targeted performance, overload protection, and tiered levels of request class performance for its hosted content sites."

Col. 3, line 53-57, "The access throughput control function of the access processing system 100 also provides the data service system 20 with overload protection and tiered levels of requests class performance when the data service system 20 are hosting multiple content sites."

Col. 6, line 35-37, "In addition, the access processing system 100 provides the server 50 with overload protection and tiered levels of request class performance."

**Note: Evidently Jin's "the access processing system" does provide "overload protection" . How?**

Jin clearly identifies as indicated below as "**Admission Controller"** as "**overload** controller" implemented on **"the access processing system 100 integrated into the class processor implemented as a thread a thread within the context of the application 106".**

Let us look at col. 9, line 21-63, "FIG. 5 shows the structure of a class processor 140 which can be any one of the class processors 102a through 102n of FIG. 3. As can be seen from FIG. 5, the class processor 140 includes an admission controller 148, a scheduler 150, and a rejection processor 149. The admission controller 148 is used in the class processor 140 to receive the access request and to process the access request received in accordance with the corresponding predetermined admission control policy. If the admission controller 148 determines to accept the access request based on the corresponding admission control policy, then the admission controller 148 sends the access request to the submission queue 103 (FIG. 3). If the admission controller 148 determines that the access request cannot be accepted based on the corresponding admission control policy, then the admission controller 148 can do one of two things. First, the admission controller 148 can send the access request to the rejection processor 149 directly. The second thing the admission controller can do is to place the access request on a best effort queue within the scheduler 150 (shown in FIG. 6 as the best effort queue 152)."....

The admission controller 148 can be implemented using any known technology. For example, when the admission control policy specifies a maximum access rate or minimally guaranteed access rate for the corresponding content site, the admission controller 148 first determines whether the specified access rate has been reached when receiving the access request. If so, the admission controller 148 can deny or defer access of the access request. If not, the admission controller 148 can accept the access request. This can be done using known technology."

Also, in order to learn more about the admission control policy, look at col. 6, line 59-col. 7, line 5, "To provide the access throughput control function, the access processing system 100 employs a predetermined or pre-configured admission control policy for each of the content sites 108-108n that requires such control. The admission control policy specifies, for example, the maximum connection and data transfer rate for the corresponding content site or the guaranteed minimum connection and data transfer rate for the content site. As another example, the admission control policy may be based on the contents accessed (e.g., pathnames) or resource utilizations (e.g., CPU and/or disk accesses). The access processing system 100 determines whether an access request should be accepted based on the corresponding admission control policy."

**Note: Thus, the underlined text above indicates that Jin has already implemented "admission controller including a scheduler and a rejection processor of Fig. 5 along with all the components of Fig. 3, element 100 on the "the access processing system 100 integrated into the class processor implemented as a thread a thread within the context of the application 106" which is "an overload controller."**

**Thus Jin clearly teaches "an overload controller provided on the control interface and responsive to an overload condition of the platform and arranged, in response to the said overload condition, to limit loading of the platform by signals arriving on said control interface.")**

**the service platform, and said messaging platform is arranged to receive control requests from the service platform via said control interface** (col. 5, line 47-col. 6, line 9, "Each of the servers 24-24n can be a connection-based (i.e., TCP-based) server or a non-connection-based server. A connection-based server can handle classifiable access requests to the contents hosted in the server. An example of a connection-based server is a web content server, an e-mail server, a news server, an e-commerce server, a local service server, a domain name server, and a proxy server. An example of a non-connection-based server is an address assignment server. Each connection-based server of the servers 24-24n includes a number of content sites. If a connection-based server is a web server, then the content sites are web sites, each of which contains a number of web pages. FIG. 3 shows the structure of a connection-based server 50 which can be any one of the connection-based servers of the servers 24-24n.

As can be seen from FIG. 3, the server 50 includes a number of content sites 108 through 108n. Each of the content sites 108-108n can be constructed using known Internet technology. A server application 106 is included in the server 50 that provides accesses to the content sites 108-108n. The application 106 can be any known application of a server in an ISP system. The server 50 also includes the access processing system 100 connected to the application 106.")

**Referring to claim 29,**

**Jin teaches a messaging system as in claim 28 in which the service platform is remote from the messaging platform.** (Fig. 2, col. 4, line 50-59,

"Referring to FIG. 2, the data service system 20 includes a number of servers 24 through 24n, a router 21, a network address translator 22, and a firewall 23. The router 21 is used for routing data to and from various modules within the data service system 20. The router 21 functions to connect the remote user terminals (e.g., the terminal 11a) to the appropriate servers 24-24n, or to the global Internet 14 or Intranet 13 via the firewall 23. The router 21 may use Asynchronous Transfer Mode (ATM) technologies to enable high bandwidth communication.", col. 1, line 16-28)

**Referring to claim 30,**

Jin teaches a messaging platform as in claim 18 for use in combination with a communications network. (Fig. 2 and Fig. 3)

**Referring to claim 31,**

Jin teaches a messaging system as in claim 28 for use in combination with a communications network. (Fig. 2 and Fig. 3)

**Referring to claim 32,**

Jin teaches a method of operating a messaging platform, the messaging platform (Fig. 1, element 20 which is "Data Service System" that can be, as stated in col. 3, line 20-25, "The data service system 20 can be employed by an Internet/Intranet Service Provider (ISP) to offer data services (e.g., web, news, or advertisement) and other services (e.g., e-commerce, **e-mail**) to users or subscribers connected to the data service system 20. The data service system 20 can also be referred to as an ISP system."

This "data service system 20" is shown with internal details in Fig.2 employing elements "SERVER" as 24....24n, as stated in col. 4, line 50-53, "Referring to FIG. 2, the data service system 20 includes a number of servers 24 through 24n, a router 21, a network address translator 22, and a firewall 23."

Now, as stated in col. 5, line 60-66, "FIG. 3 shows the structure of a connection-based server 50 which can be any one of the connection-based servers of the servers 24-24n. As can be seen from FIG. 3, the server 50 includes a number of content sites 108 through 108n. Each of the content sites 108-108n can be constructed using known Internet technology."

Having learned that Fig. 3 is connection-based email server including a number of content sites 108 through 108n, Now, col. 5, line 47-col. 6, line 9 reads, "Each of the servers 24-24n can be a connection-based (i.e., TCP-based) server or a non-connection-based server. A connection-based server can handle classifiable access requests to the contents hosted in the server. An example of a connection-based server is a web content server, an e-mail server, a news server, an e-commerce server, a local service server, a domain name server, and a proxy server. An example of a non-connection-based server is an address assignment server. Each connection-based server of the servers 24-24n includes a number of content sites. If a connection-based server is a web server, then the content sites are web sites, each of which contains a number of web pages. **FIG. 3 shows the structure of a connection-based server 50 which can be any one of the connection-based servers of the servers 24-24n.**

As can be seen from FIG. 3, the server 50 includes a number of content sites 108 through 108n. Each of the content sites 108-108n can be constructed using known Internet technology. A server application 106 is included in the server 50 that provides accesses to the content sites 108-108n. The application 106 can be any known application of a server in an ISP system. The server 50 also includes the access processing system 100 connected to the application 106. The access processing system 100 includes a QoS (i.e., Quality-of-Service) library 105 that is connected to the server application 106. The QoS library 105 provides an interface for the access processing system 100 to the application 106 such that the access processing system 100 is transparent to the application 106. This feature will be described in more detail below."

**Note: The underlined text above clearly elucidates that the ISP having Fig. 3 is connection-based email server including a number of content sites 108 through 108n, . Thus, email server including a number of content sites 108 through 108n, is "a messaging platform.")**

**including:**

**a message store arranged to receive message data and to store said message data for subsequent retrieval;**

(col. 5, line 23-28, "The local service servers support a variety of Internet applications to provide services such as access to the World Wide Web, electronic mail, bulletin boards, chat rooms, and news groups. Using web browser and other client

applications, users can access Web pages, news, and e-mail stored in the local service servers via their terminals.")

**Note: The underlined text above clearly elucidates the claim limitation.)**

**a control interface arranged to allow the communication of control signals between the messaging platform and a service provider**

(col. 6, line 59-col. 7, line 48, Note: "The access request may be a request for connection to a content site or a request to transfer data from a content site.", col. 8, line 19-32, "As can be seen from FIG. 3, the access processing system 100 includes a classifier 101, a number of class processors 102a-102n, and a submission queue 103, in addition to the QoS library 105. Alternatively, the access processing system 100 may function without some the above-mentioned modules. For example, the classifier 101 may be integrated into each of the class processors 102a-102n. As a further example, multiple submission queues may be used. Additional modules may also be included in the access processing system 100. Furthermore, the access processing system 100 may be implemented as a thread within the context of the application 106. In this case, the QoS library 105 and submission queue 103 may not be used."

**Note: Of the several options of implementation offered by Jin for it's invention, the options indicated by underlined text above is of importance to us in defining the "a control interface arranged to allow the communication of control signals", and as such "an access processing system 100 integrated into the class processor implemented as a thread a thread within the context of the application 106" is the control interface.**

(col. 5, line 47-col. 6, line 9, "Each of the servers 24-24n can be a connection-based (i.e., TCP-based) server or a non-connection-based server. A connection-based server can handle classifiable access requests to the contents hosted in the server. An example of a connection-based server is a web content server, an e-mail server, a news server, an e-commerce server, a local service server, a domain name server, and a proxy server. An example of a non-connection-based server is an address assignment server. Each connection-based server of the servers 24-24n includes a number of content sites. If a connection-based server is a web server, then the content sites are web sites, each of which contains a number of web pages. FIG. 3 shows the structure of a connection-based server 50 which can be any one of the connection-based servers of the servers 24-24n.

As can be seen from FIG. 3, the server 50 includes a number of content sites 108 through 108n. Each of the content sites 108-108n can be constructed using known Internet technology. A server application 106 is included in the server 50 that provides accesses to the content sites 108-108n. The application 106 can be any known application of a server in an ISP system. The server 50 also includes the access processing system 100 connected to the application 106. The access processing system 100 includes a QoS (i.e., Quality-of-Service) library 105 that is connected to the server application 106. The QoS library 105 provides an interface for the access processing system 100 to the application 106 such that the access processing system 100 is transparent to the application 106. This feature will be described in more detail below."

**Note: Thus "between the messaging platform and a service provider" is revealed clearly by Jin.);** and

**an overload controller provider on the control interface and responsive to an overload condition of the platform and arranged, in response to the said overload condition, to limit loading of the platform by signals arriving on said control interface.**

(col. 2, line 23-27, "A still further feature of the present invention is to allow a data service system to provide stable and targeted performance, overload protection, and tiered levels of request class performance for its hosted content sites."

Col. 3, line 53-57, "The access throughput control function of the access processing system 100 also provides the data service system 20 with overload protection and tiered levels of requests class performance when the data service system 20 are hosting multiple content sites."

Col. 6, line 35-37, "In addition, the access processing system 100 provides the server 50 with overload protection and tiered levels of request class performance."

**Note: Evidently Jin's "the access processing system" does provide "overload protection" . How?**

Jin clearly identifies as indicated below as "**Admission Controller"** as "**overload** controller" implemented on **"the access processing system 100 integrated into the class processor implemented as a thread a thread within the context of the application 106".**

Let us look at col. 9, line 21-63, "FIG. 5 shows the structure of a class processor 140 which can be any one of the class processors 102a through 102n of FIG. 3. As can be seen from FIG. 5, the class processor 140 includes an admission controller 148, a scheduler 150, and a rejection processor 149. The admission controller 148 is used in the class processor 140 to receive the access request and to process the access request received in accordance with the corresponding predetermined admission control policy. If the admission controller 148 determines to accept the access request based on the corresponding admission control policy, then the admission controller 148 sends the access request to the submission queue 103 (FIG. 3). If the admission controller 148 determines that the access request cannot be accepted based on the corresponding admission control policy, then the admission controller 148 can do one of two things. First, the admission controller 148 can send the access request to the rejection processor 149 directly. The second thing the admission controller can do is to place the access request on a best effort queue within the scheduler 150 (shown in FIG. 6 as the best effort queue 152)."....

The admission controller 148 can be implemented using any known technology. For example, when the admission control policy specifies a maximum access rate or minimally guaranteed access rate for the corresponding content site, the admission controller 148 first determines whether the specified access rate has been reached when receiving the access request. If so, the admission controller 148 can deny or defer access of the access request. If not, the admission controller 148 can accept the access request. This can be done using known technology."

Also, in order to learn more about the admission control policy, look at col. 6, line 59-col. 7, line 5, "To provide the access throughput control function, the access processing system 100 employs a predetermined or pre-configured admission control policy for each of the content sites 108-108n that requires such control. The admission control policy specifies, for example, the maximum connection and data transfer rate for the corresponding content site or the guaranteed minimum connection and data transfer rate for the content site. As another example, the admission control policy may be based on the contents accessed (e.g., pathnames) or resource utilizations (e.g., CPU and/or disk accesses). The access processing system 100 determines whether an access request should be accepted based on the corresponding admission control policy."

**Note: Thus, the underlined text above indicates that Jin has already implemented "admission controller including a scheduler and a rejection processor of Fig. 5 along with all the components of Fig. 3, element 100 on the "the access processing system 100 integrated into the class processor implemented as a thread a thread within the context of the application 106" which is "an overload controller."**

**Thus Jin clearly teaches "an overload controller provided on the control interface and responsive to an overload condition of the platform and arranged, in response to the said overload condition, to limit loading of the platform by signals arriving on said control interface.")**, the method comprising:

a) storing message data on the messaging platform; b) subsequently outputting message data from the platform, thereby allowing retrieval of a corresponding message((col. 5, line 47-col. 6, line 9, "Each of the servers 24-24n can be a connection-based (i.e., TCP-based) server or a non-connection-based server. A connection-based server can handle classifiable access requests to the contents hosted in the server. An example of a connection-based server is a web content server, an e-mail server, a news server, an e-commerce server, a local service server, a domain name server, and a proxy server. An example of a non-connection-based server is an address assignment server. Each connection-based server of the servers 24-24n includes a number of content sites. If a connection-based server is a web server, then the content sites are web sites, each of which contains a number of web pages. FIG. 3 shows the structure of a connection-based server 50 which can be any one of the connection-based servers of the servers 24-24n.

As can be seen from FIG. 3, the server 50 includes a number of content sites 108 through 108n. Each of the content sites 108-108n can be constructed using known Internet technology. A server application 106 is included in the server 50 that provides accesses to the content sites 108-108n. The application 106 can be any known application of a server in an ISP system. The server 50 also includes the access processing system 100 connected to the application 106.");

**c) detecting an overload condition of the messaging platform; and, in response to the overload condition; and d) limiting loading of the messaging platform by signals arriving on the control interface.** (col. 2, line 23-27, "A still

further feature of the present invention is to allow a data service system to provide stable and targeted performance, overload protection, and tiered levels of request class performance for its hosted content sites."

Col. 3, line 53-57, "The access throughput control function of the access processing system 100 also provides the data service system 20 with overload protection and tiered levels of requests class performance when the data service system 20 are hosting multiple content sites."

Col. 6, line 35-37, "In addition, the access processing system 100 provides the server 50 with overload protection and tiered levels of request class performance."

**Note: Evidently Jin's "the access processing system" does provide "overload protection" . How?**

Jin clearly identifies as indicated below as "**Admission Controller"** as "**overload** controller" implemented on **"the access processing system 100 integrated into the class processor implemented as a thread a thread within the context of the application 106".**

Let us look at col. 9, line 21-63, "FIG. 5 shows the structure of a class processor 140 which can be any one of the class processors 102a through 102n of FIG. 3. As can be seen from FIG. 5, the class processor 140 includes an admission controller 148, a scheduler 150, and a rejection processor 149. The admission controller 148 is used in the class processor 140 to receive the access request and to process the access request received in accordance with the corresponding predetermined admission control policy. If the admission controller 148 determines to accept the access request

based on the corresponding admission control policy, then the admission controller 148 sends the access request to the submission queue 103 (FIG. 3). If the admission controller 148 determines that the access request cannot be accepted based on the corresponding admission control policy, then the admission controller 148 can do one of two things. First, the admission controller 148 can send the access request to the rejection processor 149 directly. The second thing the admission controller can do is to place the access request on a best effort queue within the scheduler 150 (shown in FIG. 6 as the best effort queue 152)."....

The admission controller 148 can be implemented using any known technology. For example, when the admission control policy specifies a maximum access rate or minimally guaranteed access rate for the corresponding content site, the admission controller 148 first determines whether the specified access rate has been reached when receiving the access request. If so, the admission controller 148 can deny or defer access of the access request. If not, the admission controller 148 can accept the access request. This can be done using known technology."

Also, in order to learn more about the admission control policy, look at col. 6, line 59-col. 7, line 5, "To provide the access throughput control function, the access processing system 100 employs a predetermined or pre-configured admission control policy for each of the content sites 108-108n that requires such control. The admission control policy specifies, for example, the maximum connection and data transfer rate for the corresponding content site or the guaranteed minimum connection and data transfer rate for the content site. As another example, the admission control policy may be

based on the contents accessed (e.g., pathnames) or resource utilizations (e.g., CPU and/or disk accesses). The access processing system 100 determines whether an access request should be accepted based on the corresponding admission control policy.")

**Referring to claim 33,**

**Jin teaches a method as in claim 32 further comprising: e) receiving via the control interface of the message platform control requests instructing a transaction on the messaging platform,** (col. 5, line 47-col. 6, line 9, "Each of the servers 24-24n can be a connection-based (i.e., TCP-based) server or a non-connection-based server. A connection-based server can handle classifiable access requests to the contents hosted in the server. An example of a connection-based server is a web content server, an e-mail server, a news server, an e-commerce server, a local service server, a domain name server, and a proxy server. An example of a non-connection-based server is an address assignment server. Each connection-based server of the servers 24-24n includes a number of content sites. If a connection-based server is a web server, then the content sites are web sites, each of which contains a number of web pages. FIG. 3 shows the structure of a connection-based server 50 which can be any one of the connection-based servers of the servers 24-24n.

As can be seen from FIG. 3, the server 50 includes a number of content sites 108 through 108n. Each of the content sites 108-108n can be constructed using known Internet technology. A server application 106 is included in the server 50 that provides accesses to the content sites 108-108n. The application 106 can be any known

application of a server in an ISP system. The server 50 also includes the access processing system 100 connected to the application 106."

**Note: Thus, Jin teaches "Jin teaches e) receiving via the control interface of the message platform control requests instructing a transaction on the messaging platform,") and**

**wherein the step of limiting loading of the platform includes denying at least some of the control requests received via the control interface access to the platform.**

(col. 9, line 21-63, "If the admission controller 148 determines that the access request cannot be accepted based on the corresponding admission control policy, then the admission controller 148 can do one of two things. First, the admission controller 148 can send the access request to the rejection processor 149 directly."

Col. 10, line 26-27, "The rejection processor 149 is employed to handle the rejection process of the access requests."

**Note: Jin thus gives us "the rejection processor 149" as the means included by overload controller for denying at least some of the control requests in response to the overload condition.)**

**Referring to claim 34,**

**Jin teaches a method as in claim 32 further comprising:**

**receiving via the control interface of the message platform control requests instructing a transaction on the messaging platform,** (col. 5, line 47-col. 6, line 9, "Each of the servers 24-24n can be a connection-based (i.e., TCP-based) server or a

non-connection-based server. A connection-based server can handle classifiable access requests to the contents hosted in the server. An example of a connection-based server is a web content server, an e-mail server, a news server, an e-commerce server, a local service server, a domain name server, and a proxy server. An example of a non-connection-based server is an address assignment server. Each connection-based server of the servers 24-24n includes a number of content sites. If a connection-based server is a web server, then the content sites are web sites, each of which contains a number of web pages. FIG. 3 shows the structure of a connection-based server 50 which can be any one of the connection-based servers of the servers 24-24n.

As can be seen from FIG. 3, the server 50 includes a number of content sites 108 through 108n. Each of the content sites 108-108n can be constructed using known Internet technology. A server application 106 is included in the server 50 that provides accesses to the content sites 108-108n. The application 106 can be any known application of a server in an ISP system. The server 50 also includes the access processing system 100 connected to the application 106."

**Note: Thus, Jin teaches "Jin teaches e) receiving via the control interface of the message platform control requests instructing a transaction on the messaging platform,") and**

**wherein the step of limiting loading of the platform includes denying at least some of the control requests received via the control interface access to the platform.**

(col. 9, line 21-63, "If the admission controller 148 determines that the access request cannot be accepted based on the corresponding admission control policy, then the admission controller 148 can do one of two things. First, the admission controller 148 can send the access request to the rejection processor 149 directly."

Col. 10, line 26-27, "The rejection processor 149 is employed to handle the rejection process of the access requests."

**Note: Jin thus gives us "the rejection processor 149" as the means included by overload controller for denying at least some of the control requests in response to the overload condition.)**

**applying different classes of service to the control requests; and, in response to the overload condition, selectively denying some only of the control requests depending on the class of service applied to the control requests** (col. 7, line 49-51, "The access processing system 100 can be implemented in hardware, software (e.g., in operating software or at user application level), or firmware form."

col. 8, line 20-65, "As can be seen from FIG. 3, the access processing system 100 includes a classifier 101, a number of class processors 102a-102n, and a submission queue 103, in addition to the QoS library 105. Alternatively, the access processing system 100 may function without some the above-mentioned modules. For example, the classifier 101 may be integrated into each of the class processors 102a-102n. As a further example, multiple submission queues may be used. Additional modules may also be included in the access processing system 100. Furthermore, the

access processing system 100 may be implemented as a thread within the context of the application 106. In this case, the QoS library 105 and submission queue 103 may not be used.

The classifier 101 is used to determine to which one of the class processors 102a-102n the received access request should be sent. The classifier 101 makes this determination based on the destination IP address of the access request, or any other attribute such as content type (i.e., pathname in the sender's address), session identifier, destination server name of the access request. As described above, each of the class processors 102a-102n is for one of the content sites 108-108n, or for one class of the content sites 108-108n that share the same admission control policy. FIG. 4 shows the classifying process of the classifier 101, which will be described in more detail below. The classifier 101 can be implemented using any known technology.

Referring again to FIG. 3, the class processors 102a-102n are used to determine whether a received access request should be accepted based on the corresponding admission control policy. If so, the received access request is sent to the submission queue 103. If not, the access request is rejected or deferred and again processed to determine if it can be accepted on the best effort basis. FIGS. 5 and 6 show in more detail the structure of each of the class processors 102a-102n, which will be described in more detail below.

The submission queue 103 is used to queue the accepted access requests before they are received by the application library 105. The submission queue 103 has a predetermined maximum queue depth. In one embodiment, the submission queue is

a FIFO (First-In-First-Out) queue. Alternatively, the submission queue 103 can be other type of queue. The submission queue 103 can be implemented by any known technology. The submission queue 103 maintains the current depth of the queue and the class processors 102a-102n use the queue depth data of the submission queue 103 in the admission control decision." **Note : As stated above, The classifier 101 makes this determination based on the destination IP address of the access request, or any other attribute such as content type (i.e., pathname in the sender's address), session identifier, destination server name of the access request.)**

**Referring to claim 35,**

**Jin teaches a method as in claim 32 further comprising:**

**receiving via the control interface of the message platform control requests instructing a transaction on the messaging platform,** (col. 5, line 47-col. 6, line 9, "Each of the servers 24-24n can be a connection-based (i.e., TCP-based) server or a non-connection-based server. A connection-based server can handle classifiable access requests to the contents hosted in the server. An example of a connection-based server is a web content server, an e-mail server, a news server, an e-commerce server, a local service server, a domain name server, and a proxy server. An example of a non-connection-based server is an address assignment server. Each connection-based server of the servers 24-24n includes a number of content sites. If a connection-based server is a web server, then the content sites are web sites, each of which contains a number of web pages. FIG. 3 shows the structure of a connection-based server 50 which can be any one of the connection-based servers of the servers 24-24n.

As can be seen from FIG. 3, the server 50 includes a number of content sites 108 through 108n. Each of the content sites 108-108n can be constructed using known Internet technology. A server application 106 is included in the server 50 that provides accesses to the content sites 108-108n. The application 106 can be any known application of a server in an ISP system. The server 50 also includes the access processing system 100 connected to the application 106."

**Note: Thus, Jin teaches "Jin teaches e) receiving via the control interface of the message platform control requests instructing a transaction on the messaging platform,") and**

**wherein the step of limiting loading of the platform includes denying at least some of the control requests received via the control interface access to the platform.**

(col. 9, line 21-63, "If the admission controller 148 determines that the access request cannot be accepted based on the corresponding admission control policy, then the admission controller 148 can do one of two things. First, the admission controller 148 can send the access request to the rejection processor 149 directly."

Col. 10, line 26-27, "The rejection processor 149 is employed to handle the rejection process of the access requests."

**Note: Jin thus gives us "the rejection processor 149" as the means included by overload controller for denying at least some of the control requests in response to the overload condition.)**

**applying different classes of service to the control requests; and, in response to the overload condition, selectively denying some only of the control requests depending on the class of service applied to the control requests** (col. 7, line 49-51, "The access processing system 100 can be implemented in hardware, software (e.g., in operating software or at user application level), or firmware form."

col. 8, line 20-65, "As can be seen from FIG. 3, the access processing system 100 includes a classifier 101, a number of class processors 102a-102n, and a submission queue 103, in addition to the QoS library 105. Alternatively, the access processing system 100 may function without some the above-mentioned modules. For example, the classifier 101 may be integrated into each of the class processors 102a-102n. As a further example, multiple submission queues may be used. Additional modules may also be included in the access processing system 100. Furthermore, the access processing system 100 may be implemented as a thread within the context of the application 106. In this case, the QoS library 105 and submission queue 103 may not be used.

The classifier 101 is used to determine to which one of the class processors 102a-102n the received access request should be sent. The classifier 101 makes this determination based on the destination IP address of the access request, or any other attribute such as content type (i.e., pathname in the sender's address), session identifier, destination server name of the access request. As described above, each of the class processors 102a-102n is for one of the content sites 108-108n, or for one

class of the content sites 108-108n that share the same admission control policy. FIG. 4 shows the classifying process of the classifier 101, which will be described in more detail below. The classifier 101 can be implemented using any known technology.

Referring again to FIG. 3, the class processors 102a-102n are used to determine whether a received access request should be accepted based on the corresponding admission control policy. If so, the received access request is sent to the submission queue 103. If not, the access request is rejected or deferred and again processed to determine if it can be accepted on the best effort basis. FIGS. 5 and 6 show in more detail the structure of each of the class processors 102a-102n, which will be described in more detail below.

The submission queue 103 is used to queue the accepted access requests before they are received by the application library 105. The submission queue 103 has a predetermined maximum queue depth. In one embodiment, the submission queue is a FIFO (First-In-First-Out) queue. Alternatively, the submission queue 103 can be other type of queue. The submission queue 103 can be implemented by any known technology. The submission queue 103 maintains the current depth of the queue and the class processors 102a-102n use the queue depth data of the submission queue 103 in the admission control decision." **Note : As stated above, The classifier 101 makes this determination based on the destination IP address of the access request, or any other attribute such as content type (i.e., pathname in the sender's address), session identifier, destination server name of the access request.) and**

**applying different classes of service to control requests depending on the identity of an originating service provider (Note : As stated above, The classifier 101 makes this determination based on the destination IP address of the access request, or any other attribute such as content type (i.e., pathname in the sender's address), session identifier, destination server name of the access request.)**

**Referring to claim 36,**

**Jin teaches a method as in claim 32 further comprising:**

**receiving via the control interface of the message platform control requests instructing a transaction on the messaging platform,** (col. 6, line 59-col. 7, line 48, **Note: "The access request may be a request for connection to a content site or a request to transfer data from a content site.",** col. 5, line 47-col. 6, line 9, "Each of the servers 24-24n can be a connection-based (i.e., TCP-based) server or a non-connection-based server. A connection-based server can handle classifiable access requests to the contents hosted in the server. An example of a connection-based server is a web content server, an e-mail server, a news server, an e-commerce server, a local service server, a domain name server, and a proxy server. An example of a non-connection-based server is an address assignment server. Each connection-based server of the servers 24-24n includes a number of content sites. If a connection-based server is a web server, then the content sites are web sites, each of which contains a number of web pages. FIG. 3 shows the structure of a connection-based server 50 which can be any one of the connection-based servers of the servers 24-24n.

As can be seen from FIG. 3, the server 50 includes a number of content sites 108 through 108n. Each of the content sites 108-108n can be constructed using known Internet technology. A server application 106 is included in the server 50 that provides accesses to the content sites 108-108n. The application 106 can be any known application of a server in an ISP system. The server 50 also includes the access processing system 100 connected to the application 106."

**Note: Thus, Jin teaches "Jin teaches e) receiving via the control interface of the message platform control requests instructing a transaction on the messaging platform,") and**

**wherein the step of limiting loading of the platform includes denying at least some of the control requests received via the control interface access to the platform.**

(col. 9, line 21-63, "If the admission controller 148 determines that the access request cannot be accepted based on the corresponding admission control policy, then the admission controller 148 can do one of two things. First, the admission controller 148 can send the access request to the rejection processor 149 directly."

Col. 10, line 26-27, "The rejection processor 149 is employed to handle the rejection process of the access requests."

**Note: Jin thus gives us "the rejection processor 149" as the means included by overload controller for denying at least some of the control requests in response to the overload condition.)**

**applying different classes of service to the control requests; and, in response to the overload condition, selectively denying some only of the control requests depending on the class of service applied to the control requests** (col. 7, line 49-51, "The access processing system 100 can be implemented in hardware, software (e.g., in operating software or at user application level), or firmware form."

col. 8, line 20-65, "As can be seen from FIG. 3, the access processing system 100 includes a classifier 101, a number of class processors 102a-102n, and a submission queue 103, in addition to the QoS library 105. Alternatively, the access processing system 100 may function without some the above-mentioned modules. For example, the classifier 101 may be integrated into each of the class processors 102a-102n. As a further example, multiple submission queues may be used. Additional modules may also be included in the access processing system 100. Furthermore, the access processing system 100 may be implemented as a thread within the context of the application 106. In this case, the QoS library 105 and submission queue 103 may not be used.

The classifier 101 is used to determine to which one of the class processors 102a-102n the received access request should be sent. The classifier 101 makes this determination based on the destination IP address of the access request, or any other attribute such as content type (i.e., pathname in the sender's address), session identifier, destination server name of the access request. As described above, each of the class processors 102a-102n is for one of the content sites 108-108n, or for one

class of the content sites 108-108n that share the same admission control policy. FIG. 4 shows the classifying process of the classifier 101, which will be described in more detail below. The classifier 101 can be implemented using any known technology.

Referring again to FIG. 3, the class processors 102a-102n are used to determine whether a received access request should be accepted based on the corresponding admission control policy. If so, the received access request is sent to the submission queue 103. If not, the access request is rejected or deferred and again processed to determine if it can be accepted on the best effort basis. FIGS. 5 and 6 show in more detail the structure of each of the class processors 102a-102n, which will be described in more detail below.

The submission queue 103 is used to queue the accepted access requests before they are received by the application library 105. The submission queue 103 has a predetermined maximum queue depth. In one embodiment, the submission queue is a FIFO (First-In-First-Out) queue. Alternatively, the submission queue 103 can be other type of queue. The submission queue 103 can be implemented by any known technology. The submission queue 103 maintains the current depth of the queue and the class processors 102a-102n use the queue depth data of the submission queue 103 in the admission control decision." **Note : As stated above, The classifier 101 makes this determination based on the destination IP address of the access request, or any other attribute such as content type (i.e., pathname in the sender's address), session identifier, destination server name of the access request.) and**

**applying different classes of service to control requests depending on identities of customer mailboxes to which the control requests apply (Note : As stated above, The classifier 101 makes this determination based on the destination IP address of the access request, or any other attribute such as content type (i.e., pathname in the sender's address), session identifier, destination server name of the access request.).**

**Referring to claim 37,**

**Jin teaches a method as in claim 32 further comprising:**

**receiving via the control interface of the message platform control requests instructing a transaction on the messaging platform,** (col. 5, line 47-col. 6, line 9, "Each of the servers 24-24n can be a connection-based (i.e., TCP-based) server or a non-connection-based server. A connection-based server can handle classifiable access requests to the contents hosted in the server. An example of a connection-based server is a web content server, an e-mail server, a news server, an e-commerce server, a local service server, a domain name server, and a proxy server. An example of a non-connection-based server is an address assignment server. Each connection-based server of the servers 24-24n includes a number of content sites. If a connection-based server is a web server, then the content sites are web sites, each of which contains a number of web pages. FIG. 3 shows the structure of a connection-based server 50 which can be any one of the connection-based servers of the servers 24-24n.

As can be seen from FIG. 3, the server 50 includes a number of content sites 108 through 108n. Each of the content sites 108-108n can be constructed using known

Internet technology. A server application 106 is included in the server 50 that provides accesses to the content sites 108-108n. The application 106 can be any known application of a server in an ISP system. The server 50 also includes the access processing system 100 connected to the application 106."

**Note: Thus, Jin teaches "Jin teaches e) receiving via the control interface of the message platform control requests instructing a transaction on the messaging platform,") and**

**wherein the step of limiting loading of the platform includes denying at least some of the control requests received via the control interface access to the platform.**

(col. 9, line 21-63, "If the admission controller 148 determines that the access request cannot be accepted based on the corresponding admission control policy, then the admission controller 148 can do one of two things. First, the admission controller 148 can send the access request to the rejection processor 149 directly."

Col. 10, line 26-27, "The rejection processor 149 is employed to handle the rejection process of the access requests."

**Note: Jin thus gives us "the rejection processor 149" as the means included by overload controller for denying at least some of the control requests in response to the overload condition.)**

**applying different classes of service to the control requests; and, in response to the overload condition, selectively denying some only of the control requests depending on the class of service applied to the control**

**requests** (col. 7, line 49-51, "The access processing system 100 can be implemented in hardware, software (e.g., in operating software or at user application level), or firmware form."

col. 8, line 20-65, "As can be seen from FIG. 3, the access processing system 100 includes a classifier 101, a number of class processors 102a-102n, and a submission queue 103, in addition to the QoS library 105. Alternatively, the access processing system 100 may function without some the above-mentioned modules. For example, the classifier 101 may be integrated into each of the class processors 102a-102n. As a further example, multiple submission queues may be used. Additional modules may also be included in the access processing system 100. Furthermore, the access processing system 100 may be implemented as a thread within the context of the application 106. In this case, the QoS library 105 and submission queue 103 may not be used.

The classifier 101 is used to determine to which one of the class processors 102a-102n the received access request should be sent. The classifier 101 makes this determination based on the destination IP address of the access request, or any other attribute such as content type (i.e., pathname in the sender's address), session identifier, destination server name of the access request. As described above, each of the class processors 102a-102n is for one of the content sites 108-108n, or for one class of the content sites 108-108n that share the same admission control policy. FIG. 4 shows the classifying process of the classifier 101, which will be described in more detail below. The classifier 101 can be implemented using any known technology.

Referring again to FIG. 3, the class processors 102a-102n are used to determine whether a received access request should be accepted based on the corresponding admission control policy. If so, the received access request is sent to the submission queue 103. If not, the access request is rejected or deferred and again processed to determine if it can be accepted on the best effort basis. FIGS. 5 and 6 show in more detail the structure of each of the class processors 102a-102n, which will be described in more detail below.

The submission queue 103 is used to queue the accepted access requests before they are received by the application library 105. The submission queue 103 has a predetermined maximum queue depth. In one embodiment, the submission queue is a FIFO (First-In-First-Out) queue. Alternatively, the submission queue 103 can be other type of queue. The submission queue 103 can be implemented by any known technology. The submission queue 103 maintains the current depth of the queue and the class processors 102a-102n use the queue depth data of the submission queue 103 in the admission control decision." **Note : As stated above, The classifier 101 makes this determination based on the destination IP address of the access request, or any other attribute such as content type (i.e., pathname in the sender's address), session identifier, destination server name of the access request.) and**

**applying different classes of service to control requests depending on the transaction requested by the control request (Note : As stated above, The classifier 101 makes this determination based on the destination IP address of the access request, or any other attribute such as content type (i.e., pathname in**

**the sender's address), session identifier, destination server name of the access request.).**

**Referring to claim 38,**

Jin teaches a method as in claim 32 further comprising: **receiving via the control interface of the message platform control requests instructing a transaction on the messaging platform,** (col. 5, line 47-col. 6, line 9, "Each of the servers 24-24n can be a connection-based (i.e., TCP-based) server or a non-connection-based server. A connection-based server can handle classifiable access requests to the contents hosted in the server. An example of a connection-based server is a web content server, an e-mail server, a news server, an e-commerce server, a local service server, a domain name server, and a proxy server. An example of a non-connection-based server is an address assignment server. Each connection-based server of the servers 24-24n includes a number of content sites. If a connection-based server is a web server, then the content sites are web sites, each of which contains a number of web pages. FIG. 3 shows the structure of a connection-based server 50 which can be any one of the connection-based servers of the servers 24-24n.

As can be seen from FIG. 3, the server 50 includes a number of content sites 108 through 108n. Each of the content sites 108-108n can be constructed using known Internet technology. A server application 106 is included in the server 50 that provides accesses to the content sites 108-108n. The application 106 can be any known

application of a server in an ISP system. The server 50 also includes the access processing system 100 connected to the application 106."

**Note: Thus, Jin teaches "Jin teaches e) receiving via the control interface of the message platform control requests instructing a transaction on the messaging platform,") and**

**wherein the step of limiting loading of the platform includes denying at least some of the control requests received via the control interface access to the platform.**

(col. 9, line 21-63, "If the admission controller 148 determines that the access request cannot be accepted based on the corresponding admission control policy, then the admission controller 148 can do one of two things. First, the admission controller 148 can send the access request to the rejection processor 149 directly."

Col. 10, line 26-27, "The rejection processor 149 is employed to handle the rejection process of the access requests."

**Note: Jin thus gives us "the rejection processor 149" as the means included by overload controller for denying at least some of the control requests in response to the overload condition.)**

**applying different classes of service to the control requests; and, in response to the overload condition, selectively denying some only of the control requests depending on the class of service applied to the control requests** (col. 7, line 49-51, "The access processing system 100 can be implemented in

hardware, software (e.g., in operating software or at user application level), or firmware form."

col. 8, line 20-65, "As can be seen from FIG. 3, the access processing system 100 includes a classifier 101, a number of class processors 102a-102n, and a submission queue 103, in addition to the QoS library 105. Alternatively, the access processing system 100 may function without some the above-mentioned modules. For example, the classifier 101 may be integrated into each of the class processors 102a-102n. As a further example, multiple submission queues may be used. Additional modules may also be included in the access processing system 100. Furthermore, the access processing system 100 may be implemented as a thread within the context of the application 106. In this case, the QoS library 105 and submission queue 103 may not be used.

The classifier 101 is used to determine to which one of the class processors 102a-102n the received access request should be sent. The classifier 101 makes this determination based on the destination IP address of the access request, or any other attribute such as content type (i.e., pathname in the sender's address), session identifier, destination server name of the access request. As described above, each of the class processors 102a-102n is for one of the content sites 108-108n, or for one class of the content sites 108-108n that share the same admission control policy. FIG. 4 shows the classifying process of the classifier 101, which will be described in more detail below. The classifier 101 can be implemented using any known technology.

Referring again to FIG. 3, the class processors 102a-102n are used to determine whether a received access request should be accepted based on the corresponding admission control policy. If so, the received access request is sent to the submission queue 103. If not, the access request is rejected or deferred and again processed to determine if it can be accepted on the best effort basis. FIGS. 5 and 6 show in more detail the structure of each of the class processors 102a-102n, which will be described in more detail below.

The submission queue 103 is used to queue the accepted access requests before they are received by the application library 105. The submission queue 103 has a predetermined maximum queue depth. In one embodiment, the submission queue is a FIFO (First-In-First-Out) queue. Alternatively, the submission queue 103 can be other type of queue. The submission queue 103 can be implemented by any known technology. The submission queue 103 maintains the current depth of the queue and the class processors 102a-102n use the queue depth data of the submission queue 103 in the admission control decision." **Note : As stated above, The classifier 101 makes this determination based on the destination IP address of the access request, or any other attribute such as content type (i.e., pathname in the sender's address), session identifier, destination server name of the access request.) and**

**applying different classes of service to control requests depending on the transaction requested by the control request** (Note : As stated above, The classifier 101 makes this determination based on the destination IP address of the access

request, or any other attribute such as content type (i.e., pathname in the sender's address), session identifier, destination server name of the access request.).

**wherein the messaging platform includes: a plurality of mailboxes containing message data, each mailbox being switchable between an open state, in which message data may be written to or read from the mailbox, and a closed state, and in which the step of limiting loading includes allowing requests for the closing of a mailbox** (col. 3, line 17-25, Note: "The data services offered by the data service system 20 can be, for example, web, news, e-mail, e-commerce, advertisement, or other types of data services. Here, a customer means the entity contracting with the data service system 20 to have its content hosted in the data service system 20, or to have its services (e.g., e-commerce, e-mail, or news group) offered through the data service system 20. A user means the entity accessing one or more of the content sites hosted in the data service system 20."

Col. 4, line 36-40, col. 5, line 7-30 **Note: Using web browser and other client applications, users can access Web pages, news, and e-mail stored in the local service servers via their terminals.**", col. 5, line 47-62 **Note: Accessing e-mail stored in the servers inherently has switchable functions of opening, reading and closing of mail box.) and denying requests for the opening of a mailbox** (col. 6, line 59-col. 7, line 48, **Note: "The access request may be a request for connection to a content site or a request to transfer data from a content site." Thus, "a request to transfer data from a content site" that is "requests for the opening of a mailbox" is denied by access processing system of Jin. )**

***Conclusion***

**Examiner's note:** Examiner has cited particular columns and line numbers in the references as applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner.

NATHAN FLYNN
SUPERVISORY PATENT EXAMINER

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ashok B. Patel whose telephone number is (571) 272-3972. The examiner can normally be reached on 6:30 am-4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan A. Flynn can be reached on (571) 272-1915. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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